THE ROBARTS STUDY: A SURVEY OF SCHOOL-AGE HEARING-IMPAIRED CHILDREN

MERRILL C. SITKO, Principal Investigator
Frank B. Harper
Patricia A. Allison

This report was funded under contract by the Ministry of Education, Ontario.
It reflects the views of the authors and not necessarily those of the Ministry.

The Honourable Sean G. Conway, Minister
George R. Podrebarac, Deputy Minister

Ministry of Education
Ontario

THE ROBARTS STUDY: A SURVEY OF SCHOOL-AGE HEARING-IMPAIRED CHILDREN

MERRILL C. SITKO, Principal Investigator
Frank B. Harper
Patricia A. Allison

This report was funded under contract by the Ministry of Education, Ontario.
It reflects the views of the authors and not necessarily those of the Ministry.

The Honourable Sean G. Conway, Minister
George R. Podrebarac, Deputy Minister

Ontario

© The Minister of Education, Ontario, 1985

Queen's Park
Toronto, Ontario

Canadian Cataloguing in Publication Data

Sitko, Merrill C.
The Robarts study

ISBN 0-7729-0718-8

1. Deaf--Education--Ontario--London. I. Harper, Frank B. II. Allison, Patricia A. III. Ontario. Ministry of Education. IV. Title.

HV2579.057S57 1985 371.91'2'0971326 85-093038-3

ON03901

Additional copies may be ordered from:

Publication Sales
The Ontario Institute for Studies in Education
252 Bloor Street West
Toronto, Ontario
M5S 1V6

or from:

The Ontario Government Bookstore
880 Bay Street
Toronto, Ontario
M7A 1N8

(Mails orders)
Publication Centre
880 Bay Street, 5th Floor
Toronto, Ontario
M7A 1N8

CONTENTS

LIST OF TABLES iv

PROJECT PURPOSE 1

METHODOLOGY 3
- Superintendent Interviews 3
- Pupil Information 4
- Parent Interviews 4
- Analysis 4

RESULTS 5
- A: The Boards and Their Services 5
- B: The Hearing-Impaired Students 13
- C: The Parents 23

CONCULSIONS 29

APPENDICES 33
- A: Superintendent Interview Schedule 35
- B: Pupil Information Sheet 37
- C: Parent Interview Schedule 39

LIST OF TABLES

1	Description of Boards and Services	7
1 Supplementary	Proportion of Parent Sample by Board	9
2	Hearing-Impaired Students Who Left School in 1984-85	10
2 Supplementary	Distribution of Students According to Hearing Loss and Board	11
3	Distribution of Students According to Hearing Loss	14
3 Supplementary	Age by Hearing Loss	15
4	Degree of Hearing Loss and Other Handicapping Conditions	18
5	Age by Grade For All Hearing-Impaired Students	19
6	Elementary Programs According to Hearing Loss	20
7	Secondary Programs According to Hearing Loss	21
8	Parent Responses to the Question of Sending Their Hearing-Impaired Children to a Provincial School	25
9	Career Goals and Post Secondary Plans of Hearing-Impaired Secondary Students	28

PROJECT PURPOSE

I - To interview board of education directors, or their designees, to identify the school-age hearing-impaired children within the catchment area of the Robarts School, London, Ontario.

II - To establish the kinds of hearing losses the children have, and to determine how their needs are being met by local boards.

III - To conduct a follow-up survey of a sample of parents to ascertain on what knowledge base they made their decision to keep their hearing impaired-child in a local program and whether they were aware of the Robarts School and what it had to offer.

METHODOLOGY

Three categories of data were collected for each board in the area. (Copies of all three instruments are appended to this report.) First, the Director of Education for each of the twenty-five boards was contacted and asked to either designate an appropriate supervisory officer for interview or to be interviewed himself or herself, in order to collect data about the boards and their services to hearing-impaired students. In all twenty-five boards, the directors chose to designate the supervisory officer in charge of special education for the interview. As part of this interview, superintendents were asked to give an accurate count of the number of hearing-impaired students currently served by their systems, and to provide an information sheet for each of these students. Superintendents were also asked to provide a list of the parents of these students.

Superintendent Interviews

All superintendent interviews were arranged at the convenience of the superintendent involved. Twenty-three were carried out face-to-face in the relevant board offices. Two of the superintendents were interviewed by telephone because of difficulties involved in arranging suitable times for personal interviews. All face-to-face interviews were recorded on audio tape and on the interview schedule sheet. Responses as recorded on the sheets were later checked against the recorded tape to ensure accuracy.

Pupil Information

Superintendents were asked to fill out a Pupil Information Sheet for every hearing-impaired student in their system. These sheets included the student's age, grade, current program, audiogram readings, and brief statements regarding other handicaps and the type of testing that was recorded on the student's record card. Using the audiogram readings as given on this sheet, a new variable of degree of hearing loss was created for each of these pupils and added to the body of information.

Parent Interviews

Parents' names and telephone numbers were provided by the supervisory officers or their departments. In some cases these names and telephone numbers were part of the Pupil Information Sheet. In many boards, however, owing to a concern about the confidentiality of records, these names and numbers were provided separately from the student information. In those boards where ten or less hearing-impaired students were accommodated, all parents were interviewed. In boards where there were more than ten students (thirteen of the twenty-five), random sampling techniques were used to find ten parents to interview. Parents were telephoned to arrange a suitable time for interviews, and all interviews were conducted over the telephone. Responses were recorded on the interview schedule. Many of the questions asked of parents related specifically to opinions and attitudes.

Analysis

Data collection was not complete. One board declared having no hearing-impaired students at all, since service was purchased for all of these students from the closest large jurisdiction. One board declined to supply any information on pupils and parents. Five boards agreed to supply information but failed to do so within the extended time period allotted to this study. In order to circumvent this problem, statistical measures were used to provide estimates wherever necessary.

All data were coded according to category - superintendent, pupil, or parent - and entered into the computer for analysis. All analysis was performed using the Statistical Package for Social Scientists and the Cyber computer. Analysis consisted of frequency counts on all variables and correlation analysis to determine trends and relationships between responses. The statistic used as a measure of the strength of correlation is the Chi square test, which, being a non-parametric measure, was considered to be the most appropriate.

RESULTS

The results will be presented in three sections, corresponding more or less exactly to the three data collection procedures. This will provide a logical sequence, beginning with the boards themselves and the services they provide, and ending with parental attitudes and opinions.

A. THE BOARDS AND THEIR SERVICES

The information collected for each board is summarized in tabular form in table 1. Twenty-three of the boards were mostly rural and had a total student enrolment of less than 20,000 students. Six of the boards had an enrolment of less than 5,000 students. Fourteen of the boards were public and eleven were separate.

The actual number of hearing-impaired students in a jurisdiction varied from less than five in six boards to almost a hundred in one. The majority of the boards served less than fifteen hearing-impaired students.

Only four boards had special segregated classes for the hearing-impaired, but the majority of the boards provided services for some hearing-impaired students in segregated special education classrooms. Nine of the boards did, however, provide a special resource teacher for the hearing impaired to support hearing-impaired students who were at least partially integrated into regular classrooms, and the majority of boards had special education resource teachers who provided support to integrated hearing-handicapped students.

Other types of support that do not appear on the table included specialist speech teachers, who work with hearing-impaired students, and a variety of mechanical aids for the student, the student and the teacher, or for the classroom. Two boards used teacher aides working directly with the hearing-impaired student.

The majority of boards said that none of these services were a result of the Education Amendment Act (Bill 82). One superintendent frankly said that the entire program had come about as a result of Bill 82, and nine others said that their services had expanded and improved a great deal as a result of the legislation. Some of these superintendents expressed the opinion that this was in fact the case for all boards in the province whether they chose to recognize it or not. None of the boards reported new programs beginning in September 1985, but several reported that new personnel will be hired or new emphases will be taken, as part of a general consolidation and expansion of services to the hearing-impaired.

All boards reported using the resource services provided by the Robarts School, and all were very enthusiastic about these resources and the quality of service received. Many superintendents voiced the opinion that they were in many respects dependent upon the resources provided to them in this way. Other services used locally vary according to geographical location. Local hospitals and public health services seem to be the most common providers of assessment services in addition to those provided by the Robarts School. Specialist centres in London and Hamilton were also mentioned.

Twelve boards reported using the Stanford Achievement Test for the Hearing Impaired in the assessments of hearing-handicapped students, although in many cases the test is administered by Robarts personnel rather than local board personnel. The majority of boards

also used regular intelligence and achievement tests for their hearing-impaired students on the same basis as regular students.

Superintendents were questioned specifically about hearing-impaired students who left their systems within the last school year. In the twenty-five boards, sixteen students were reported to have left school. Of these, one graduated with a Certificate of Training, two with the Secondary School Graduation Diploma, and two with the Secondary School Honours Graduation Diploma. Nine moved to schools in other jurisdictions, and one more presumably did also, but full information was not available. Only one hearing-impaired student was reported to have dropped out of school altogether, this being at the Grade 11 level. Table 2 provides a brief summary of this information.

Significant Relationships

When all data were analyzed a number of significant correlations were found. As might have been expected, the size of the school system, in terms of total student enrolment, seems to be the most important factor in determining a number of other variables. Smaller jurisdictions are more likely to be rural and are more often separate rather than public systems. Smaller systems enrol fewer hearing-impaired students, with the number of hearing-impaired students being proportional to the total number of students in the system. Small systems do not have segregated classes for the hearing impaired, and are unlikely to have a special resource teacher for the hearing impaired. They are also less likely to make use of specialized tests such as the S.A.T.H.I., which is probably also a reflection of the general lack of specialized personnel available in a small board. All other correlations relate directly to these differences in terms of size. Because rural systems are smaller, they have fewer services and fewer hearing-handicapped students and use fewer specialized tests, and all of these variables appear to be interrelated and dependent upon system size. There is a tendency for separate systems to provide service to proportionally fewer hearing-handicapped students, and as a logical corollary there is a tendency for separate systems to purchase service for students more often than their public counterparts, from whom the service very often is purchased. It is evident, therefore, that the size of the system is the major determinant in the type of services provided and the numbers of hearing handicapped students accommodated.

Superintendents were asked a number of questions about their attitudes and opinions with regard to the accommodation of hearing-impaired students. They were extremely supportive of the resource services offered by the Robarts School, but several of them questioned the philosophy of the residential approach at the present time when the educational paradigm that predominates tends, as far as possible, toward integration of students with their peers and home communities. A number of specific suggestions regarding possible changes in the provision of services were made, and these will be discussed in the final section of this report.

TABLE 1

DESCRIPTION OF BOARDS AND SERVICES

	Total pupils	Region	Hearing impaired pupils	Special classes for h.i.	H.I.pupils in sp. ed. classes	Special h.i. res. teacher	Special education teachers	Services affected by Bill 82
London Public	40,631	WE	93	YES	YES	YES	YES	YES
London Middlesex R.C.	10,850	WE	23	NO	YES	YES	YES	YES
Middlesex County	10,822	WE	21	NO	YES	YES	YES	NO
Elgin R.C.	1,655	WE	1	NO	YES	NO	YES	YES
Elgin County	13,570	WE	18	NO	NO	NO	YES	NO
Perth County	11,760	WE	7	NO	YES	YES	YES	NO
Oxford County	14,801	WE	15	NO	YES	NO	YES	NO
Oxford R.C.	1,865	WE	3	NO	YES	NO	YES	NO
Lambton R.C.	6,716	WE	4	NO	YES	YES	YES	YES
Lambton County	18,385	WE	12	NO	YES	YES	YES	YES
Huron Perth R.C.	2,613	WE	5	NO	YES	NO	YES	YES
Huron County	10,112	WE	11	NO	YES	NO	YES	NO
Brant R.C.	3,27[illegible]	CE	10	NO	YES	NO	YES	NO
Brant County	16,498	CE	15	YES	NO	YES	NO	NO
Kent County	16,604	WE	27	YES	YES	YES	YES	YES
Kent R.C.	5,490	WE	5	NO	YES	NO	YES	NO
Norfolk County	9,007	CE	15	NO	YES	NO	YES	YES
Haldimand Norfolk R.C.	2,421	CE	2	NO	NO	NO	YES	NO
Essex County	16,963	WE	21	NO	YES	NO	YES	NO
Essex R.C.	9,334	WE	10	NO	YES	NO	YES	NO
Windsor Public	22,150	WE	51	YES	YES	YES	YES	NO
Windsor R.C.	14,107	WE	5	NO	NO	NO	YES	YES
Bruce County	10,468	WE	12	NO	YES	NO	YES	NO
Bruce Grey R.C.	3,780	WE	7	NO	YES	NO	YES	NO
Grey County	13,357	WE	14	NO	NO	NO	YES	YES

TABLE 1 contd.

	Robarts services used:				Tests in use:				
	Pre-sch.	Consult.	In-serv.	Assess.	SATHI	Adapted IQ	Regular IQ	Standard TBS	Local TBS
London Public	YES	YES	YES	YES	YES	YES	YES	YES	YES
London Middlesex R.C.	YES	YES	YES	YES	YES	NO	YES	YES	YES
Middlesex County	YES	YES	YES	YES	YES	NO	YES	YES	YES
Elgin R.C.	YES	YES	YES	YES	NO	NO	NO	YES	NO
Elgin County	NO	YES	YES	YES	YES	NO	NO	NO	NO
Perth County	YES	YES	YES	YES	NO	YES	YES	NO	YES
Oxford County	NO	YES	YES	YES	NO	NO	YES	YES	NO
Oxford R.C.	YES	YES	YES	YES	YES	YES	YES	YES	NO
Lambton R.C.	YES	YES	YES	YES	YES	NO	YES	YES	NO
Lambton County	YES	YES	YES	YES	YES	NO	YES	YES	NO
Huron-Perth R.C.	YES	YES	YES	YES	YES	YES	NO	NO	YES
Huron County	YES	YES	YES	YES	YES	NO	YES	YES	NO
Brant R.C.	YES	YES	YES	YES	YES	YES	YES	YES	NO
Brant County	YES	YES	YES	YES	NO	NO	YES	YES	YES
Kent County	YES	YES	YES	YES	NO	NO	YES	YES	NO
Kent R.C.	YES	YES	YES	YES	d/k	d/k	YES	d/k	d/k
Norfolk County	YES	YES	YES	YES	d/k	d/k	d/k	d/k	d/k
Haldimand Norfolk R.C.	YES	YES	YES	NO	YES	NO			
Essex County	YES	YES	YES	YES	NO	YES	YES	YES	YES
Essex R.C.	NO	YES	YES	YES	YES	NO	YES	YES	NO
Windsor Public	YES	YES	YES	YES	NO	NO	NO	YES	d/k
Windsor R.C.	YES	YES	YES	YES	d/k	d/k	d/k	d/k	d/k
Bruce County	YES	YES	YES	NO	YES	NO	YES	YES	NO
Bruce Grey R.C.	YES	YES	YES	YES	YES	YES	YES	YES	NO
Grey County	YES	YES	YES	YES	NO	NO	NO	YES	YES

SUPPLEMENTARY TABLE 1

PROPORTION OF PARENT SAMPLE BY BOARD

Board	#Hearing impaired	#Parents interviewed	%parents interviewed
London Public	93	10	11%
London Middlesex R.C.	23	*	-
Middlesex Co.	21	10	48%
Elgin Co.	18	11	61%
Elgin R.C.	1	1	100%
Perth Co.	7	*	-
Oxford Co.	15	9	60%
Oxford R.C.	3	3	100%
Lambton R.C.	4	3	75%
Lambton Co.	12	6	50%
Huron-Perth R.C.	5	5	100%
Huron Co.	11	9	82%
Brant R.C.	10	9	90%
Brant Co.	15	11	73%
Kent Co.	27	10	37%
Kent R.C.	5	4	80%
Norfolk Co.	15	*	-
Haldimand-Norfolk R.C.	2	*	-
Essex Co.	21	*	-
Essex R.C.	10	*	-
Windsor Public	51	10	20%
Windsor R.C.	5	*	-
Bruce Co.	12	9	75%
Bruce-Grey R.C.	7	*	-
Grey Co.	14	5	38%
TOTALS	407	125	31%

*data not supplied in time

TABLE 2

HEARING-IMPAIRED STUDENTS WHO LEFT SCHOOL IN 1984 - 1985

	Graduated with S.S.H.G.D.	S.S.G.D.	Cert.Tr.	Moved to other brd.	Dropped out	TOTALS
Perth County	-	-	-	1	-	1
London Middlesex R.C.	-	-	-	1	-	1
London Public	-	-	2	2	1	5
Middlesex County	-	-	-	2	-	2
Haldimand/Norfolk	-	-	-	1	-	1
Kent County	1	1	-	-	-	2
Brant R.C.	-	-	-	1	-	1
Bruce County	1	1	-	1	-	3
TOTALS	2	2	2	9	1	16

SUPPLEMENTARY TABLE 2

DISTRIBUTION OF STUDENTS ACCORDING TO HEARING LOSS AND BOARD

Board	Mild Up to 40dB	Mod. 40-60dB	Sig. 60-70dB	Severe 70-90dB	Prof. 90dB Up	Not specified	TOTALS
London Public	28	27	5	13	12	8	93
London Middlesex R.C.	21	7	-	-	-	1	29
Middlesex Co.	9	4	3	1	-	1	18
Elgin Co.	3	-	-	1	-	5	9
Elgin R.C.	-	1	-	-	-	-	1
Perth Co.	5	1	-	1	-	-	7
Oxford Co.	8	4	1	1	-	4	18
Oxford R.C.	2	1	-	-	-	-	3
Lambton R.C.	-	-	-	-	-	4	4
Lambton Co.	4	3	1	4	-	-	12
Huron-Perth R.C.	-	-	-	-	-	5	5
Huron Co.	4	2	3	-	-	1	10
Brant R.C.	-	-	-	-	-	9	9
Brant Co.	2	5	1	3	-	6	17
Kent Co.	3	5	-	3	1	15	27
Kent R.C.	-	-	-	-	-	5	5
Norfolk Co.	-	-	-	-	-	15	15
Haldimand-Norfolk R.C.	-	1	-	-	-	1	2
Essex Co.	5	3	1	2	-	10	21
Essex R.C.	8	-	-	2	-	-	10
Windsor Public	2	15	11	9	15	-	52
Windsor R.C.	5	-	-	-	-	-	5
Bruce Co.	10	1	-	-	-	1	12
Bruce-Grey R.C.	4	3	-	-	-	-	7
Grey Co.	3	2	-	-	-	-	5
TOTALS	126 41%	85 28%	26 9%	40 13%	28 9%	91	396

B. THE HEARING-IMPAIRED STUDENTS

Detailed information on students was collected from nineteen of the twenty-five boards. One board declared having no hearing-impaired students accommodated within the system, this being a separate board that purchased services from its neighbouring public board. Of the remaining five boards, one refused to supply information on students, and the other four agreed to do so but failed to provide the information. In the nineteen boards, 331 hearing-impaired students were accommodated. In the remaining boards a further 76 students were accommodated, for whom information was not available, thus making a total of 407 hearing-impaired students in the entire region. Table 3 shows how many of these students fell into the three higher categories of degree of hearing loss that were created from the data, these being profound hearing loss (over 90dB), severe hearing loss (between 70 and 90dB), and a category termed significant loss (between 60 and 70dB) that was created to identify those students who fell just below the current eligibility criterion for the Robarts School. Using the distributions from the known data, it is possible to predict where in the matrix of age and degree of loss the remaining pupils, for whom information was not available, would be located. Thus, as table 3 shows, it is possible to state that there were 14 pupils with greater than 70dB loss in secondary programs, and a further 10 pupils with a significant loss. At the elementary level there were 60 pupils with greater than a 70dB loss and a further 21 with a significant loss. These represent total numbers, without regard to factors such as other handicaps or the feelings of parents with regard to alternative accommodation for the pupil.

Distribution of Hearing-Impaired Students

Location. Over one-third of the hearing-impaired students (35.4%) were accommodated in boards enrolling more than 20,000 pupils in total, these being urban boards. In fact, this means that one third of the hearing-impaired pupils in the catchment area were being served by either the London Public School Board or the Windsor School Board, both of which provide a wide spectrum of services to hearing-handicapped students. Of the remaining pupils another 18.4% of the total were accommodated in boards with total enrolments of 15,000 to 20,000 pupils. According to the analysis of the superintendent interviews, this means that a fairly wide range of services would be available to these students, although not the same range of services as in the two very large boards. This means that less than half of the hearing-handicapped students (46.2%) were accommodated in smaller boards with fewer services.

Age. Approximately one-quarter of the hearing-impaired students identified by boards were over the age of fourteen (25.1%). A slightly larger proportion (39.0%) were between the ages of ten and thirteen, which correlates roughly with the upper elementary grades. Approximately another quarter (28.4%) were between six and nine years of age, roughly the age of the lower elementary grades. Boards were also providing service to a small number of preschool students, 7.4% of the total group, ranging in age from three to six years. This would seem to be evidence of early identification procedures and an attempt to provide suitable programs as early as possible to hearing-handicapped students. It would seem, therefore, that the distribution of this population by age is virtually the same as the distribution by age of the total child population. The same can also be said of gender, since 49% of this population is male and 51% is female.

Degree of Loss. Using categories commonly found in the literature, students were divided into those with mild hearing loss (below 40dB), those with moderate hearing loss (40dB to

TABLE 3

DISTRIBUTION OF STUDENTS
ACCORDING TO HEARING LOSS

Probable year of entry to secondary school	Age	60-70dB	70-90dB	Over 90dB	TOTAL
	18+	2 (3)	2 (3)	1 (2)	5 (8)
	17	1 (1)	1 (1)	1 (1)	3 (3)
	16	3 (4)	- (1)	- (1)	3 (6)
	15	1 (2)	3 (4)	- (1)	4 (7)
1985	14	2 (3)	2 (3)	2 (3)	6 (9)
1986	13	1 (2)	3 (5)	- (1)	4 (8)
1987	12	1 (2)	3 (5)	1 (2)	5 (9)
1988	11	- (1)	1 (3)	1 (2)	2 (6)
1989	10	- (2)	1 (4)	1 (2)	2 (8)
1990	9	- (1)	- (1)	- (1)	- (3)
1991	8	1 (2)	2 (4)	1 (2)	4 (8)
1992	7	- (1)	1 (2)	1 (2)	2 (5)
1993	6	2 (3)	2 (4)	1 (2)	5 (9)
1994	5	- (1)	1 (2)	4 (4)	5 (7)
	3/4	3 (3)	4 (5)	1 (1)	8 (9)
TOTALS		17 (31)	26 (47)	15 (27)	58 (105)

Numbers in parentheses represent totals when missing data are apportioned according to population parameters and added to the available figures which are shown to the left.

Boards for whom no detailed information is available: London Middlesex R.C.
Middlesex County
Norfolk County
Essex R.C.
Perth County (refused)

SUPPLEMENTARY TABLE 3

AGE BY HEARING LOSS

Year sec. entry	Age	Mild	Moderate	Signif.	Severe	Profound	TOTALS
	18+	2 (5)	5 (7)	1 (2)	1 (2)	1 (2)	10 (18)
	17	3 (4)	0 (1)	1 (1)	1 (1)	1 (1)	6 (8)
	16	5 (8)	5 (7)	3 (4)	0 (1)	0 (1)	13 (21)
	15	2 (5)	5 (7)	1 (2)	3 (4)	0 (1)	11 (19)
1985	14	8 (13)	2 (5)	4 (5)	5 (6)	2 (3)	21 (32)
1986	13	14 (20)	9 (13)	2 (3)	3 (2)	0 (1)	28 (42)
1987	12	12 (17)	4 (7)	3 (4)	4 (6)	1 (2)	24 (36)
1988	11	13 (18)	6 (9)	1 (2)	2 (4)	2 (3)	24 (36)
1989	10	15 (22)	14 (19)	1 (2)	4 (6)	2 (3)	36 (52)
1990	9	8 (12)	5 (8)	0 (1)	1 (2)	0 (1)	14 (24)
1991	8	11 (16)	8 (11)	1 (2)	2 (3)	1 (2)	23 (34)
1992	7	5 (8)	9 (11)	0 (1)	1 (2)	1 (2)	16 (24)
1993	6	8 (12)	3 (6)	4 (5)	3 (4)	5 (6)	23 (33)
1994	5	1 (3)	4 (6)	0 (0)	1 (2)	6 (6)	12 (17)
	3/4	0 (1)	0 (1)	3 (3)	4 (5)	1 (1)	8 (11)
TOTALS		107 (164)	79 (118)	25 (37)	35 (53)	23 (35)	269 (407)

Numbers in parentheses represent totals when missing data are apportioned according to population parameters and added to absolute figures which are shown to the left.

60dB), those with severe hearing loss (70dB to 90dB), and those with profound hearing loss (over 90dB). A further category was created, comprising those with a significant loss, between 60dB and 70dB; that is to say, those whose hearing loss falls just short of elilgibility for the Robarts School. It should be mentioned that degree of loss was a new variable created from the audiogram readings given by boards. In just over one-quarter of the cases no audiogram readings were available. Estimates of degree of loss provided by boards in lieu of actual audiogram readings were not used, since the reliability of these estimates is open to question. Thus, for one quarter of all identified hearing-handicapped students, accurate data on the severity of hearing loss are apparently not kept by the boards providing service to these students.

Approximately one-third of those students for whom data are available fall into the mild loss category (30.8%). A slightly larger proportion (31.2%) have a moderate loss, making it the largest single group. Approximately one-quarter of the students for whom data are available (28.1%) have either a severe or profound hearing loss. The remaining 10% have a significant loss of between 60dB and 70dB.

Other Handicaps. The greater proportion of hearing-impaired students (74.7%) have no other handicapping conditions. The most common other handicap stated was that of generally low intellectual functioning, which was expressed in several ways, for 8.2% of the group. A further 3.9% were classed as trainable mentally retarded, 3.3% were said to have specific language difficulties, 2% were listed as specifically learning disabled, and 1% as behaviourally maladjusted. Physical or orthopaedic problems were listed for 6.3% of the students, and these ranged from very minor eyesight problems to more serious physical handicaps. Two pupils, comprising 0.7% of the total population of hearing-impaired students, were reported as having a language other than English as the home language. Table 4 shows how other handicaps relate to hearing loss. It is apparent that among students with profound hearing loss, other physical handicaps were evident in 25% of the cases, and the incidence of other types of handicapping conditions increased as hearing loss decreased, with a fairly even distribution of other handicaps in all other categories of hearing loss. In terms of the total catchment area, therefore, one-quarter of all hearing-impaired students suffered other handicaps in addition to their hearing handicap.

Grade Level. Table 5 shows the distribution of the population for whom complete data is available by age and grade. It is apparent that there is a high degree of consistency between these students and the normal distribution of their peers by age and grade.

Program. Six different types of elementary programs and twelve types of secondary programs were specified on the Pupil Information Sheet. Table 6 shows how pupils were distributed over the six elementary programs according to the degree of hearing loss. As might have been expected, these two variables show a strong relationship: pupils with milder losses are more likely to be accommodated in regular classrooms and pupils with more severe losses are more likely to be accommodated in special classrooms. This strong relationship was used later when analyzing parent data, in that type of program was used as a close proxy of degree of hearing loss, as table 6 shows it to be.

Table 7 shows the program information relating to secondary pupils. The twelve program types were collapsed into three categories: those in which students are in a regular secondary program with support from a resource teacher for the hearing impaired; those in which students are in a regular secondary program with support from a special education teacher; and those in

which students are in a regular secondary program with no regularly scheduled resource support. This last category, and the sixth category in elementary programs, does not necessarily preclude all resource or support help, but merely signifies that this support is not regularly scheduled. The same relationship between program and degree of loss is also seen in table 7. Further information for secondary programs pertains to the level at which most courses are taken. Almost half of the hearing-impaired secondary students (45.9%) take most of their courses at the basic level; 10.8% take a mixture of basic and general level courses; 35.1% take most of their courses at the general level; and 8.1% take most of their courses at the advanced level.

Significant Relationships

The most significant relationship for pupils seems to be that between degree of hearing loss and program: pupils with more severe losses are accommodated in more specialized programs. Programs are also affected by a group of variables that relate to board size. The relationship between board size and types of programs offered was noted in the preceding section of this report, and it comes as no surprise, therefore, to discover that the type of program in which a student is placed depends somewhat upon the board in which the student is accommodated. This does not mean that pupils in smaller boards are denied access to more specific programs, since, as was shown in earlier discussion, boards purchase specific programs for students for whom they feel they cannot provide appropriate services. As a general observation, therefore, it can be said that the type of program in which a student is placed depends to a large extent on the severity of that student's hearing loss, and the more severely hearing-handicapped students are more likely to be accommodated in larger boards, either because they are under that jurisdiction or because service is purchased for them from that jurisdiction, such that students with more severe hearing handicaps tend to be accommodated in more specific programs and students with milder hearing handicaps tend to be accommodated in less specific programs.

TABLE 4

DEGREE OF HEARING LOSS
AND OTHER HANDICAPPING CONDITIONS

	Mild Under 40dB	Moderate 40 - 60dB	Signif. 60 - 70dB	Severe 70 - 90dB	Profound Over 90dB
Specific Learning Disability	3.9%	1.4%	-	2.8%	-
Language Disability	5.2%	2.7%	-	2.8%	-
Generally lower functioning	11.7%	12.3%	-	5.6%	-
Behaviorally Maladjusted	2.6%	-	-	-	-
Trainable Retarded	2.6%	5.5%	8.7%	5.6%	-
Physically Handicapped	5.2%	4.1%	13.0%	2.8%	25.0%
English as Second Language	-	1.4%	-	-	-
No other handicaps	68.8%	72.6%	78.3%	80.6%	75.0%
TOTALS	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE 5

AGE BY GRADE FOR
ALL HEARING-IMPAIRED STUDENTS

Age	Grade Pre.	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTALS
3/4	8														8
5	11														11
6	7	9													16
7	1	6	4												11
8		1	9	5											15
9		1	1	10	2										14
10				9	10	6									25
11					5	8	3								16
12				1		8	6	4	1						20
13							6	14	7						27
14								3	3	6					12
15									4	7	1				12
16										7	7	1			15
17											1	2	3		6
18+											1	3	7	2	13
TOTAL	27	17	14	25	17	22	15	21	15	20	10	6	10	2	N=221*

* The total sample is 312, the number here is lower, since all students for whom either of these data are not available are excluded from the cross tabulation.

TABLE 6

ELEMENTARY PROGRAMS
ACCORDING TO HEARING LOSS*

	Mild Under 40dB	Moderate 40 - 60dB	Significant 60 - 70dB	Severe 70 - 90dB	Profound Over 90dB	Total
Segregated class for the hearing-impaired	4.8% 1.7% (1)	19.0% 7.1% (4)	14.3% 20.0% (3)	33.3% 24.1% (7)	28.6% 24.0% (6)	100
Segregated class for special education	37.4% 10.3% (6)	37.5% 10.1% (6)	12.5% 13.3% (2)	12.5% 6.9% (2)	- - 	99.9
Partially segregated partially integrated	20.0% 20.7% (12)	28.3% 30.3% (17)	8.3% 30.0% (5)	16.6% 34.5% (10)	26.7% 64.0% (16)	99.9
Regular class with hearing resource	26.7% 6.9% (4)	20.0% 5.3% (3)	20.0% 20.0% (3)	33.3% 17.2% (5)	- - 	100
Regular class with special ed. resource	57.9% 18.9% (11)	36.8% 12.5% (7)	- - 	5.3% 3.4% (1)	- - 	100
Regular class with no regular resource	46.2% 41.4% (24)	36.5% 34.0% (19)	3.8% 13.3% (2)	7.7% 13.8% (4)	5.8% 12.0% (3)	100
Total	99.9	99.3	96.6	99.9	100	

* This table should be read in the following manner:

. all underlined numbers are to read downwards, (i.e., the percentage of children with this hearing loss to be found in each type of classroom);

. numbers in parentheses represent the actual number of students in each cell of the matrix;

. other numbers are to be read across, (i.e., the percentage of children in this type of class with each hearing loss).

N = 183. Again, all students for whom full data are not available are excluded from calcualtions.

According to the results of Chi square testing, this distribution has a probability of .000.

TABLE 7

SECONDARY PROGRAMS
ACCORDING TO HEARING LOSS*

	Mild Under 40dB	Moderate 40 - 60dB	Significant 60 - 70dB	Severe 70 - 90dB	Profound Over 90dB	Total
Regular with hearing resource	10.0% 10.0% (1)	30.0% 23.1% (3)	20.0% 28.6% (2)	20.0% 40.0% (2)	20.0% 66.7% (2)	100
Regular with special ed. res.	11.1% 10.0% (1)	44.4% 30.8% (4)	33.3% 42.9% (3)	11.1% 20.0% (1)	- - 	99.9
Regular with no scheduled res.	42.1% 80.0% (8)	31.6% 46.2% (6)	10.5% 28.6% (2)	10.5% 40.0% (2)	5.3% 33.3% (1)	100
Total	100	100.1	100.1	100	100	

* This table should be read in the following manner:

. all underlined numbers are to be read downwards, (i.e., the percentage of students with this hearing loss in each type of program);

. numbers in parentheses represent the actual number of students in each cell of the matrix;

. other numbers are to be read across, (i.e., the percentage of students in this type of program for each category of hearing loss).

N = 38 Again, all students for whom full data were not available are excluded from calculations.

According to the results of Chi square testing, this distribution has a probability of .000.

C. THE PARENTS

One hundred and twenty-six parents were interviewed. One hundred and one of these were parents in public school boards and twenty-five in separate boards. As was explained earlier, these interviews represent a random sampling in larger boards and a total population in smaller boards. The representation of students in these parent interviews is slightly different from the distribution of the student population according to age, grade, and program but not significantly so.

Pupil Needs. Parents were asked to describe what they saw as the special needs of their hearing-handicapped children. Almost a quarter of the parents interviewed (24.4%) said that their children had no needs that were not being fully met. Other parents described special needs, and frequently added that these needs were being well met: 21% felt that their children needed help with their communication skills generally; 17.6% felt that their children needed extra help with all subjects; 16.8% felt that their children could manage normally when provided with adequate mechanical aids. Other needs mentioned by only a few parents included the need to mix with normal children, the need for frequent one-to-one instruction and the need to be placed with good and understanding teachers.

The greater proportion of parents (83.9%) declared that they were quite happy with the program offered to their hearing-handicapped children. This proportion remained constant throughout all sub-groups of the population, unaffected by board, location, program, or age of the child in question. It was observed, however, that of the 12.1% of parents who were not happy with the program and the 4% who were ambivalent about the program, all had children in elementary school. None of the parents of secondary students declared themselves to be anything but satisfied with the program offered to their children.

The Robarts School. Approximately one third of the parents interviewed (35.2%) had used pre-school services offered by the Robarts School. This figure is artifically low because a large proportion of the students represented by these parents were not identified as hearing handicapped before entering school. Slightly more parents (38.7%) think that the Robarts School is currently providing service to their children in school. This response rate is clearly an indication that parents suffer from a lack of information in this regard, since the information gained from local boards puts the actual figure at a much higher level. This observation is supported by responses to other questions: only slightly more than half of the parents (52.8%) were aware that the Robarts School provides any resource services to school boards at all. Even fewer parents (42.8%) were aware of the pre-school services offered, and less than half knew anything about the secondary program at the Robarts School. When asked what exactly they do know about the school, over a third of the parents (35%) declared that they really don't know anything about it, even though some of them had visited the school at some time for assessments.

This lack of information would seem to indicate that there is a need for more communication with parents regarding the ways in which the Robarts School provides resources and support to local boards - communication from the Robarts School, the Ministry of Education, and the local boards. It must be added here that a further demonstration of lack of information was found among superintendents. Some of the superintendents, although very knowledgeable with regard to Robarts resource services, stated that there were no students from their jurisdictions in residential programs at the Robarts School, when in fact this was

not the case at all. Clearly there is a need for further dissemination of information regarding exactly what the Robarts School does.

Of those parents who did know something about the school, the most common response was that the programs offered by the school, both internally and externally, were excellent. A few parents (14.2%) felt that the school provided services only to the very deaf, and a similar number (14.2%) felt that, although the resource services were excellent, the residential program, relying predominantly on signing, was undesirable since it increased the segregation of students rather than helping them to integrate.

Information regarding the school at Milton was less common among parents. More than three-quarters of the parents interviewed (79.6%) report knowing nothing about the school although most have heard of it. Only two parents, comprising 1.8% of the parent sample, had heard negative things about the school. One parent felt that the school was too big and one had heard that it had drug problems. All other parents who did know something about the school were very positive about it.

The Decision to Send. Parents were asked whether they would send their children to the Robarts School if this were possible. Only 40.7% of the parents said they would; 44.1% said definitely that they would not; and the remaining 15.3% said that they would most likely not, but this was contingent upon other variables. Indeed, of the 40.7% who said that they would send their children, the majority qualified this statement by saying that they would send their children only if the local board program were no longer available or proved to be inadequate. When asked specifically why they would not send their children, if this had been their response, parents gave a number of reasons. The most commonly given reason was that they were perfectly satisfied with the program offered locally (32.8%). The next most common response was that it was not necessary for the child to be sent to the Robarts School (26.2%) because his/her hearing loss did not warrant this. The next largest group of responses (18%) was from parents who declared that they would not send their children because they did not approve of the program offered at the Robarts School and did not think it was appropriate (in most of these cases parents referred specifically to the emphasis on signing). A smaller group of parents (13.1%) declared that they simply did not wish to send their children away from home, and a few (3.3%) declared that the child would not wish to go away. A small proportion of parents (4.9%) reported that the child had been in the program at the Robarts School and this had not proven satisfactory.

Table 8 summarizes the above results broken down into elementary and secondary parent responses, and also summarizes responses to a similar set of questions about the school in Milton. Only a quarter (25.3%) of the parents said they would consider sending their children to Milton. The most common reason for not wishing to send children was that it was too far away, otherwise the reasons given were very similar to the reasons for not sending children to the Robarts School. These responses seem to indicate that for most parents the idea of sending their hearing-handicapped children to any residential institution is not particularly popular, and becomes less popular as the distance involved increases.

It is evident from the breakdowns shown in table 8 that secondary parents are much less likely to agree to sending their children to either school than are elementary parents. In fact, more than 80% of secondary parents declared that they would definitely not send their children to either school. Although elementary parents are not so unanimous, it is evident that only half of them would consider sending their children to the Robarts School, and one

TABLE 8

PARENT RESPONSES TO THE QUESTION OF SENDING THEIR HEARING-IMPAIRED CHILDREN TO A PROVINCIAL SCHOOL

	% of elementary parents	% of secondary parents	% of Total
1) Would you send your child to the Robarts School?			
YES	52.3%	10.5%	44.9%*
NO - I am happy with current program	14.8%	31.6%	17.8%
NO - His/her loss is not that severe	12.5%	26.3%	15.0%
NO - I don't want to send child away	6.8%	10.5%	7.5%
NO - I did and it didn't work out	1.1%	10.5%	2.8%
NO - The child doesn't want to go	-	10.5%	1.9%
NO - I don't approve of the program	12.5%	-	10.3%
2) Would you send your child to the school in Milton?			
YES	38.2%	18.2%	34.8%
NO - I don't know enough about it	7.2%	18.2%	9.1%
NO - I would prefer London	9.1%	-	7.6%
NO - I don't want to send child away	9.1%	-	7.6%
NO - His/her loss is not that severe	18.2%	9.1%	16.7%
NO - It is too far away	18.2%	36.4%	21.2%
NO - The child doesn't want to go	-	18.2%	3.0%

* These percentages of the total differ from those given in the text because all ambivalent and undecided responses have been deleted for the sake of clarity.

third to the school in Milton. Thus, the catchment area figures given earlier can be effectively halved to account for those students whose parents would not send them anyway, according to the trends observed in this study.

Social Considerations. Although less than half of the parents interviewed reported that their hearing-handicapped children knew other hearing-handicapped children outside of school, the greater majority (83.6%) declared that their children had plenty of opportunity to take part in extra-curricular and recreational activities if they so wished.

Career Goals. Parents of secondary students were asked about the career ambitions of their hearing-impaired children. Table 9 summarizes the responses given to this and subsequent related questions. The spread of career goals from professional to unskilled shows a normal distribution. Almost all parents either held the same ambitions for their children as the children held for themselves or had no firm goals in mind. Only a few parents felt that their children's goals were too ambitious.

Post-secondary plans, as summarized in table 9, also show a fairly normal distribution, with perhaps more students hoping to go to university than might have been expected. Some of this may be attributed to confusion on the part of parents about the type of training necessary for certain occupations. It is important to note, however, that virtually all parents in this group (94.1%) felt that the school program in which their secondary children were enroled would enable them to pursue these post-secondary plans. The same proportion of parents also felt that their children had a good chance of achieving their stated goals. This would seem to be a particularly optimistic view, and seems to indicate again that these parents are very happy with the programs currently offered to their children.

Significant Relationships. Secondary parents tend to be much more satisifed with the current program offered to their children than are elementary parents, although the level of satisifaction is extremely high in this group as well. In this sample none of the secondary parents were less than satisfied with the current program. Secondary parents were much less likely to consider sending their children to the Robarts School than were elementary parents, and the reasons for not wishing to send children also differed. Secondary parents were more likely to say that they would not send their children because they are quite happy with the program offered at the local level. Elementary parents were more likely to say that they would not wish to send their children because they disapprove of the program at Robarts than were secondary parents, although the most common reason among elementary parents also was that the current offerings of the local board are satisfactory. These statistically significant differences imply that elementary and secondary parents hold somewhat different opinions, but it is beyond the scope of this study to speculate what the reason for this difference might be.

A further significant difference was found with regard to how much information parents have about the services offered by the Robarts School. Those parents who know more about these services tend to be happier with the program offered to their children. This would seem to imply that parents are happier when they know and understand more about what is being done to help their children. This reinforces the earlier call for further information regarding these services being communicated to parents.

The overall pattern of these findings, and the responses given by parents generally, seems to indicate that parents as a whole tend to favour local programs, where possible, over sending students to a segregated school. Parents of younger children seem to be more open to

the possibility of alternatives to the local program, but parents whose children are already in the secondary age group are less open to this idea. It can be assumed that, on average, only half of these parents, whose children might be eligible for such a program, would actually consider sending them, and then only, in most cases, if the local program were to cease to exist. It would appear that parents who understand more about the resources that support their children in their current placements are generally more likely to be happy with those placements. There is no doubt that the greater majority of parents are perfectly satisfied with the programs currently offered locally, are assured that these programs will prepare their children well for their future careers, and would not wish to take their children out of these programs and send them to either the Robarts School or another similar provincial school for the hearing impaired.

TABLE 9

CAREER GOALS AND POST SECONDARY PLANS
OF HEARING IMPAIRED SECONDARY STUDENTS

	Career goals: Professional	Semi-professional	Skilled	Semi-skilled	Unskilled	Don't know
% of students	17.6%	17.6%	29.4%	11.8%	5.9%	17.6%

	Post-secondary plans: University	Community College	Apprenticeship	Job
% of students	31.3%	37.5%	12.3%	18.8%

CONCLUSIONS

As revealed in the results section, the survey produced a broad range of demographic data and descriptive trends. Based on the findings, the following conclusions and recommendations can be formulated.

1) Of the 407 hearing-impaired students identified in the Robarts catchment area, there are currently 14 students at the secondary level who have a decibel loss of 70dB or greater. Of these children, only two families would seriously consider sending their children to the Robarts School and two additional families would give thought to the possibility. The remaining families (71%) are quite satisfied with their children's existing local secondary program. In fact, there was no significant correlation between the degree of satisfaction with current student programs and the severity of hearing loss or the size of a particular school board. Parents with children at all levels of hearing loss (mild, moderate, significant, severe, and profound), and in both large and small boards, tend to be quite satisfied with their children's current program (83.9%) at both the secondary and elementary levels.

2) If the current admission criteria and program at the Robarts School were changed to accommodate students with significant hearing loss (i.e., 60dB to 70dB), then an additional 10 secondary students in the catchment area might qualify for entrance. However, since only 30% of parents of secondary-age students would consider sending their children to Robarts, approximately 3 additional students could actually be expected to enroll in a revised Robarts program in the near future.

3) At the elementary level, approximately 90 students have a loss of 70dB or more, while an additional 25 students have a significant loss of 60dB to 70dB (total = 115). The projected breakdown in absolute numbers for these students across various grades is given in table 3. Regardless of their children's current academic program (i.e., segregated vs. resource vs. integrated), 40% of parents would seriously consider sending their children to Robarts. At the severe and profound levels, this would constitute 23 children who are currently at the elementary level (Grades K-8). Of the majority of parents who would not consider sending their children to Robarts, most are very happy with their children's current program, feel that the children's needs are being fully met, and do not think a residential program at either the Robarts or Drury School is appropriate for their children. In fact, only 25% of the parents would consider sending their children to the E.C. Drury School in Milton.

It appears that most parents of students at all levels of hearing loss strongly believe in the current "zeitgeist" of mainstreaming or integration with regular student peers. Parents of young children were more vocal in saying they would not send their children to Robarts School because they disapprove of the program there, whereas parents of secondary students say they would not send their children because they are generally happy with the local program as offered. Most parents reported that the E. C. Drury program in Milton was too far and was not necessary for their children. Many parents felt the residential programs at Robarts and Drury were too highly focused on signing and needed to be broadened with an orally-based program.

4) In general, parent knowledge of the Robarts' secondary program was very low (approximately 64% were not aware of it), as was their knowledge about the Drury school in Milton (approximately 80% knew nothing). It would appear more information needs to be circulated concerning these two residential secondary programs and the resources they offer in order for parents to make an informed choice regarding pupil placement. However, as it now stands, regardless of their children's current programs and the severity of their children's hearing loss, most parents are satisifed with their current programming and see no need to send their children to the residential programs at Robarts or Milton.

5) Parents who were aware, and superintendents, were extremely positive concerning the Robarts resource services provided for the hearing-impaired preschoolers and school-age pupils, and would like to see these resource services greatly expanded. They especially praised the classroom-based resources that lead to effective program recommendations and accommodations for hearing-impaired students in both integrated and segregrated settings. On the other hand, a significant percentage of parents at the preschool and school levels did not know of the Robarts School resources (i.e., approximately 50%). Again more community dissemination of the Robarts School resources is in order.

6) As expected, larger boards and public boards offered a wider range of services for their hearing-impaired students and revealed larger numbers of hearing-impaired students in their jurisdictions. In fact, over one-third of the hearing-impaired students in the Robarts School catchment area are in boards of over 20,000 pupils. Almost 90% are in public boards. Smaller boards especially reveal small numbers of hearing-impaired students and few supportive services. Therefore they rely heavily on the assessment services, inservicing and consultative services offered by the Robarts resource staff for their teachers and consultants. All boards strongly endorsed and recommended additional in-service education by the Robarts staff for their teachers and special education consultants, as well as for administrators like themselves. They further reported additional assistance to aid them in identifying student needs and placing their hearing-impaired students in appropriate programs in segregated, resource, and integrated settings.

7) According to the board superintendents, very few hearing-impaired students left school or dropped out of their local programs during the current academic year (N=16). The majority of these students either moved to other schools (N=9) or graduated with some recognition of training.

8) The superintendents made several recommendations during their interviews. As a group, they felt that the Robarts School should offer a program for hearing-impaired students who have other handicaps as well, especially those who are mentally retarded (developmentally disabled) and hearing-impaired. These are the students local boards have the greatest difficulty accommodating. A strong recommendation was that the Robarts School should offer a short-term intensive program for some students, with the intent of giving the student some coping strategies, providing some orientation to local board people who will be working with the student, and sending the student home in a short time complete with a curriculum approach suited to the student's learning needs. It was also recommended that Robarts should offer a program for French hearing-impaired children and that the admission criteria to the Robarts School should be more flexible and recognize

functional impairments as well as decibel levels. The superintendents strongly felt it is time to rethink the whole idea of provincial residential schools. In the current climate, local boards want to provide for their own and parents want to "keep their kids at home". More resource services, including inservice training, additional resource teachers and language consultants, parent education, interpreters, technology, etc., would be needed to help local boards achieve this goal. This recommendation was strongly supported by the majority of parents across all levels of hearing loss and age range. Both parents and superintendents were generally satisfied with the quality of programs offered to hearing-impaired students in their own jurisdictions.

9) Most parents (84%) felt there were sufficient extra-curricular activities in their local areas for their hearing-impaired children. However, a majority (57%) of parents did not know of other hearing-impaired children in their area. It would appear the special education consultants could share this information with the parents of hearing-impaired students.

10) The career goals of secondary students were spread across several areas (e.g., professional, semi-professional, skilled, semi-skilled). It is interesting that approximately half of the parents shared career goals that were the same as their children's. On the other hand, 41% did not hold specific career goals for their children, and 12% reported less ambitious career goals. Nevertheless, the vast majority (94%) of parents think their children have a good chance of achieving their career goals. It is significant that approximately 70% of hearing-impaired students want to go to university or community college. Moreover 94% of the parents feel that the current school program will enable the student to do this. The validity of these assumptions should probably be explored with these parents.

Based on the project findings, it is apparent that the majority of parents and educators surveyed in the project are recommending a new or revised focus for the Robarts School in London. They see Robarts serving more as a provincial special education resource centre in the area of hearing impairment and associated handicaps. In addition, they believe the Robarts School should offer a short-term, intensive residential program for some language-disabled students with the purpose of developing individualized academic and social programs that would be followed up and implemented in the students' local area. If this recommendation were implemented, it would appear that a short-term solution is still required for the residential students in the existing programs at the Robarts School.

One alternative is to maintain the current Robarts program capitalizing on the advantages of the core and co-operative education programs. Another alternative is to integrate the current students into the existing board resources for hearing-impaired and language-disordered students in the London area or their home areas. Of course, if this action were carried out, the local boards would require additional teaching and support services to accommodate the students. On the other hand, some parents would possibly consider transferring their children into the current residential program at the E.C. Drury School in Milton. Again, additional resources would be required to accommodate the increased enrolment at the Drury School.

The data collected in this survey indicate the attitudes and opinions of the majority of parents and educators in the project sample correspond with the intent or philosophy of Bill

82. Most parents feel quite strongly that their local boards should be meeting the needs of their handicapped children including contact with their regular nonhandicapped peers. To accomplish this "mainstreaming", they see a critical need for the Ministry of Education to provide the required financial resources for both their local boards and the Robarts School to implement this mandate. It would be necessary to critically evaluate the efficacy of any mainstreaming movement over both the short and long term. In fact, any solution to the current Robarts School enrolment dilemma should be systematically evaluated to determine its programmatic, social, and financial efficacy.

APPENDICES

A: Superintendent Interview Schedule

B: Pupil Information Sheet

C: Parent Interview Schedule

APPENDIX A

SUPERINTENDENT INTERVIEW

1. How many deaf or hard of hearing students do you serve in your system? _____

2. Which of the following services does your board offer to these students?

   a) Self-contained classes for the hearing impaired?

   b) Self-contained special education classes ?

   c) Special resource teacher(s) for the hearing impaired?

   d) Special education resource teacher(s)?

   e) Other? _____

   _____

   _____

3. Which of these services were introduced in response to Bill 82?

   _____

4. Does your board plan to introduce any new services in September 1985?

   _____

5. What resources does your board use to assist the hearing impaired students?

   a) Resource services consultant from The Robarts School?

   b) Pre-school home visitation teacher from The Robarts School?

   c) Robarts teacher in-service resources, such as workshops or presentations?

   d) Clinical and/or assessment services? _____

   _____

   e) Other: _____

   _____

6. What objective tests are used for hearing impaired students in your jurisdiction?

   a) The Stanford Achievement Test for the Hearing Impaired?

   b) Specially adapted intelligence tests?

   c) Regular intelligence tests?

   d) Standardized tests of basic skills?

   e) Locally created tests of basic skills?

   f) Informal or teacher-made tests?

   g) Other: _____

7. How many hearing impaired students left your system last year? _____

   How many graduated with a Certificate of Training? _____

   How many graduated with an S.S.G.D.? _____

   How many graduated with an S.S.H.G.D.? _____

   How many went to school elsewhere? _____

   How many dropped out of school? _____ At what grade level(s)? _____

* * * * * * * * * *

8. What do the parents in your jurisdiction think about The Robarts School?

9. What do the parents think about the school at Milton?

10. How much do you know about the school at Milton?

APPENDIX B

PUPIL DOCUMENTATION

Name: _____ Date of birth: _____ Male/Female

Address: _____ Phone: _____

Hearing loss according to audiogram: Right ear _____ Left ear _____

Any other handicap or exceptionality? _____ Grade: _____

Type of program:
1 Elementary - segregated class for the hearing impaired.
2 Elementary - segregated special education class.
3 Elementary - partially integrated, partially segregated.
4 Elementary - regular class, withdrawal by hearing impaired teacher.
5 Elementary - regular class, withdrawal by special education teacher.
6 Elementary - regular class, no withdrawal.
7 Secondary - training program with specialist hearing teacher
8 Secondary - training program with special education resource teacher.
9 Secondary - training program, no special resource.
10 Secondary - S.S.G.D. program with special hearing resource teacher.
11 Secondary - S.S.G.D. program with special education resource teacher.
12 Secondary - S.S.G.D. program, no resource.
13 Secondary - S.S.H.G.D. program, with hearing resource teacher.
14 Secondary - S.S.H.G.D. program with special education teacher.
15 Secondary - S.S.H.G.D. program with no resource.
*16 Secondary - O.S.S.D. program with hearing resource teacher.
*17 Secondary - O.S.S.D. program with special education teacher.
*18 Secondary - O.S.S.D. program with no resource.

(If 16, 17 or 18, are most of courses at Basic ___, General ___, or Advanced ___ level?)

Objective tests recorded : (as on O.S.R.)
1 S.A.T.- H.I.
2 Adapted I.Q.
3 Regular I.Q.
4. Standardized tests of basic skills.

APPENDIX C

PARENT SURVEY

Board: _____

Grade level of hearing impaired child: _____

---

1. What program is your child currently in?

2. What do you think are your child's special needs?

3. Are you satisfied with the education program being offered to him/her?

4. Did you receive support in the form of pre-school home visitation or clinical services from The Robarts School?

   If not, were you aware of these services?

5. Does your child's school receive any support services from Robarts that you know of, such as pupil education resources, teacher in-service resources, or clinical services?

   Did you know that these services were available?

Secondary only:

6. What are your child's career goals?

7. What career goals do you hold for your child?

8. Do you think that your child has a chance of meeting these goals?

9. In order to meet these goals, what would your child need to do after finishing secondary school:

   go to university?

   go to a community college?

   get an apprenticeship?

   go directly into a job?

10. Is your child currently in a program which will make this possible?

All parents:

11. Were you aware that it might be possible for your child to attend The Robarts School for secondary education?

12. What do you know about The Robarts School? (What sort of place do you think it is?)

13. If there were a secondary program at Robarts suitable for your child, would you be prepared to enrol him/her in that program?

    If not, why not?

14. What do you know about the school for the deaf at Milton?

15. If there were a secondary program suitable for your child at that school, would you be prepared to send him/her?

    If not, why not?

16. Do you know of any other hearing impaired children in your home area?

17. How much is your child able to participate in social and extra-curricular activities at school?